

THE WALL STREET JOURNAL

JUN 24 1987

## NCR Introduces a Software System, Venture's First Commercial Product

By SETH H. LUBOV  
And PAUL DUKE JR.  
Staff Reporters of THE WALL STREET JOURNAL

NCR Corp. introduced a software system that uses computer-generated artificial intelligence to aid in the design of computer microcircuits.

The system, called Design Advisor, is the first commercial product to be based on technology developed by Microelectronics & Computer Technology Corp., an Austin, Texas, cooperative research venture of which NCR is a member. MCC started doing advanced computer research in January 1984.

Artificial intelligence is a branch of computer science that deals with developing computers that can reason, understand, recognize and solve difficult problems and duplicate the human thought process.

The Dayton, Ohio-based maker of computers and business machines said the Design Advisor, which is used on engineering workstations, reviews proposed circuit designs and offers advice on how designs may be improved.

Industry analysts said the software is notable because it will reduce the amount of time needed to design complicated, custom semiconductor chips. NCR is a market leader in the sale of the widely used chips, known as application specific integrated circuits.

"The time savings is an important feature," said Bill Groves, vice president, technology, of In-Stat Inc., a Scottsdale, Ariz., semiconductor market research concern. "ASIC designs tend to be very complicated, and it can be very expensive to go back to check for errors. So this makes a good checkpoint before a manufacturer commits to processing."

For Microelectronics & Computer Technology, the public introduction of the system is another step in the group's shift from pure research to an emphasis on "transferring" that research to the 20

high-technology companies that own the group.

The clearest sign of that shift came in March when Grant Dove, a former Texas Instruments Inc. executive, was named chairman and chief executive officer of MCC, succeeding Adm. Bobby R. Inman. Adm. Inman, a former director of the National Security Agency and deputy director of the Central Intelligence Agency, was a high-profile figure needed to bring the group into being.

Mr. Dove is seen as more of a "hands-on" manager who has set himself the task of bringing MCC's research to the marketplace.

While the NCR artificial intelligence system is the first product derived from MCC research that outside customers will use directly, a number of companies are using MCC research internally. Both Minnesota Mining & Manufacturing Co. and Boeing Co., for instance, are making microchips using MCC research into how those chips are linked to each other and the computers in which they operate....

NCR said the software system will be available this fall as a service and it will be sold in early 1988 as a software package for industry standard engineering workstations.

NCR shares closed yesterday at \$77.25, off \$1.25, in New York Stock Exchange composite trading.